

1 REMARKS

2 Status of the Claims

3 Claims 1 and 9-38 are now pending in the present application, Claims 2-8 and 39-55 having  
4 been previously cancelled due to an election made in response to a restriction requirement. Claim 1  
5 has been amended to distinguish over the cited art. Claims 9-38 have been allowed.

6 Rejection of Claim 1 under 35 U.S.C. § 103

7 The Examiner has rejected Claim 1 under 35 U.S.C. § 103 as being obvious over Hayes in  
8 view of Craggs. The Examiner asserts that Hayes discloses each aspect of the present invention,  
9 except for curved vanes, and that it would have been obvious to modify the impeller described by  
10 Hayes to incorporate the curved vanes disclosed by Craggs. Applicants have further amended  
11 Claim 1 to distinguish over the cited art.

12 As amended, Claim 1 recites that at least some of the plurality of vanes either have a base  
13 that extends laterally to a greater extent than does an upper surface of the vane, or are shorter in  
14 length than other of the vanes (i.e., some of the vanes are truncated vanes). Each such type of  
15 vane has already been recited in the claim structure, thus the present amendment does not raise a  
16 new issue requiring a further search.

17 Claim 10 recites vanes that have a base that extends laterally to a greater extent than does  
18 an upper surface of the vane, and Claim 14 recites truncated vanes. The specification as filed  
19 (page 6, first paragraph) states that "Truncated impeller vanes are smaller in length than other  
20 impeller vanes. Such truncated impeller vanes can range in length from about 10% to about 90%  
21 of the length of a 'normal' impeller vane. Any ratio of truncated impeller vanes can be used in  
22 proportion to the number of impeller vanes employed." The cited art does not appear to teach or  
23 suggest either element, nor is there any evidence that such structures would solve any specific  
24 problem recognized in the art. Claim 1 as amended thus recites a novel impeller, and the  
25 rejection of Claim 1 should be withdrawn.

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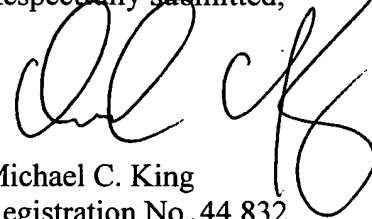
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1 In view of the preceding remarks, it should be evident that this application is in condition  
2 for allowance and should be passed to issue without delay. Should any further questions remain,  
3 the Examiner is invited to telephone applicant's attorney at the number listed below.  
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5 Respectfully submitted,  
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7   
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10 MCK/RMA:lrg  
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12 I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed  
13 envelope as first class mail with postage thereon fully prepaid addressed to: Commissioner for Patents,  
14 Alexandria, VA 22313-1450, on November 18, 2004.

15 Date: November 18, 2004  
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